

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: **Nao FUJITA et al.**

Serial No.: **Not Yet Assigned**

Filed: **August 24, 2001**

For: **METHOD FOR PURIFICATION OF VINYL POLYMERS**

**PRELIMINARY AMENDMENT**

Commissioner for Patents  
Washington, D.C. 20231

August 24, 2001

Sir:

Prior to the calculation of the filing fees of the above application, please amend the application as follows:

**IN THE CLAIMS:**

Please amend claims 15, 16, 19-27, 30-31 and 34 as follows:

15. (Amended) The method for purification according to Claim 2

wherein the vinyl polymer having at least one alkenyl group per molecule is obtainable by the atom transfer radical polymerization of a vinyl monomer using a transition metal complex as a polymerization catalyst.

16. (Amended) The method for purification according to Claim 2

wherein the alkenyl group is located at the molecular chain terminus of the vinyl polymer.

19. (Amended) The method for purification according to Claim 1 or 2 wherein the vinyl polymer is a (meth)acrylic polymer.
20. (Amended) The method for purification according to Claim 1 or 2 wherein the vinyl polymer has a number average molecular weight of 500 to 100000.
21. (Amended) The method for purification according to Claim 1 or 2 wherein the vinyl polymer has a molecular weight distribution value of less than 1.8.
22. (Amended) The method for purification according to Claim 1 or 2 wherein a center metal of the transition metal catalyst belongs to group 8, group 9, group 10 or group 11 of the periodic table of the elements.
24. (Amended) The method for purification according to Claim 1 or 2 wherein a polyamide compound is used as a catalyst ligand for atom transfer radical polymerization.
25. (Amended) A vinyl polymer as obtainable by the method for purification according to Claim 1 or 2.
26. (Amended) A hydrosilylatable composition comprising the vinyl polymer obtainable by

the method for purification according to Claim 1 or 2.

27. (Amended) A hydrosilylatable composition comprising

(A) an alkenyl group-containing vinyl polymer obtainable by the method for purification according to Claim 1 or 2, and

(B) a hydrosilyl group-containing compound.

30. (Amended) The hydrosilylatable composition according to Claim 26

comprising a platinum catalyst.

31. (Amended) A crosslinkable silyl group-containing vinyl polymer obtainable by hydrosilylation of the hydrosilylatable composition according to Claim 26.

34. (Amended) A curable composition

comprising the vinyl polymer according to Claim 31.

REMARKS

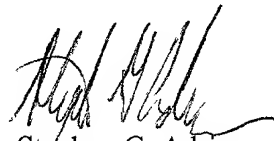
The above amendment is believed to place the claims in proper condition for examination.  
Early and favorable action is awaited.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

In the event there are any additional fees required, please charge our Deposit Account No.  
01-2340.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

Claims 15, 16, 19-27, 30-31 and 34 have been amended as follows:

15. (Amended) The method for purification according to ~~any of Claims 2 to 14~~ Claim 2  
wherein the vinyl polymer having at least one alkenyl group per molecule is obtainable by  
the atom transfer radical polymerization of a vinyl monomer using a transition metal complex as a  
polymerization catalyst.

16. (Amended) The method for purification according to ~~any of Claims 2 to 15~~ Claim 2  
wherein the alkenyl group is located at the molecular chain terminus of the vinyl polymer.

19. (Amended) The method for purification according to ~~any of Claims 1 to 18~~ Claim 1  
or 2  
wherein the vinyl polymer is a (meth)acrylic polymer.

20. (Amended) The method for purification according to ~~any of Claims 1 to 19~~ Claim 1  
or 2  
wherein the vinyl polymer has a number average molecular weight of 500 to 100000.

21. (Amended) The method for purification according to ~~any of Claims 1 to 20~~ Claim 1  
or 2  
wherein the vinyl polymer has a molecular weight distribution value of less than 1.8.

22. (Amended) The method for purification according to ~~any of Claims 1 to 21~~ Claim 1  
or 2

wherein a center metal of the transition metal catalyst belongs to group 8, group 9, group 10 or group 11 of the periodic table of the elements.

24. (Amended) The method for purification according to ~~any of claims 1 to 23~~ Claim 1 or 2

wherein a polyamide compound is used as a catalyst ligand for atom transfer radical polymerization.

25. (Amended) A vinyl polymer as obtainable by the method for purification according to ~~any of Claims 1 to 24~~ Claim 1 or 2.

26. (Amended) A hydrosilylatable composition comprising the vinyl polymer obtainable by the method for purification according to ~~any of Claims 1 to 25~~ Claim 1 or 2.

27. (Amended) A hydrosilylatable composition comprising  
(A) an alkenyl group-containing vinyl polymer obtainable by the method for purification according to ~~any of Claims 1 to 25~~ Claim 1 or 2, and  
(B) a hydrosilyl group-containing compound.

30. (Amended) The hydrosilylatable composition according to ~~any of Claims 26 to 29~~ Claim 26  
comprising a platinum catalyst.

31. (Amended) A crosslinkable silyl group-containing vinyl polymer obtainable by hydrosilylation of the hydrosilylatable composition according to ~~any of Claims 26 to 30~~ Claim 26.

34. (Amended) A curable composition  
comprising the vinyl polymer according to ~~any of Claims 31 to 33~~ Claim 31.

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